

From: Sternberg, David [Sternberg.David@epa.gov]
Sent: 5/20/2021 9:46:24 PM
To: Fernandez, Cristina [Fernandez.Cristina@epa.gov]; Melvin, Karen [Melvin.Karen@epa.gov]; Landis, Jeffrey [Landis.Jeffrey@epa.gov]; White, Terri-A [White.Terri-A@epa.gov]; Nitsch, Chad [Nitsch.Chad@epa.gov]
CC: Kim, Lena [Kim.Lena@epa.gov]; Daniel, Kevin [Daniel.Kevin@epa.gov]; Chow, Alice [chow.alice@epa.gov]; Delgrosso, Karen [Delgrosso.Karen@epa.gov]; Koffi, LaRonda [Koffi.LaRonda@epa.gov]; Ferrell, Mark [Ferrell.Mark@epa.gov]; Seneca, Roy [Seneca.Roy@epa.gov]
Subject: Recommended response to WV Gazette-Mail questions

These questions do not fall within any one division. There is an element of APD #3 and ECAD #1. So far we have not been able obtain any information regarding question 2. Given that the reporter's "hard" deadline is at Noon tomorrow, I think that this is the best we can do. Special thanks to Alice Chow, Kevin Daniel, Lena Kim and Karen Delgrosso for helping to pull this together.

David

Reporter: Mike Tony WV Gazette-Mail mtony@hdmediallc.com

Question 1. I was hoping one of you could help answer by my hard deadline of Friday at noon on this. Does EPA know what the actual consumption, use or storage levels of ethylene or ethylene oxide have been in recent years at Union Carbide's South Charleston and Institute facilities? If so, can you provide those levels by year?

The South Charleston site is a manufacturing facility that annually produces many different specialty chemicals. Most are intermediates used in other processes or sold to customers who convert them into finished products. Union Carbide South Charleston handles and stores threshold quantities of chemicals following the Risk Management Program (RMP). Regulated toxic substances at the South Charleston Plant include ethylene oxide (EtO) currently used/stored at 90,000 lbs. The EtO number at South Charleston has increased over previous required 5 year EPA RMP submittals of EtO from 73,000 lbs.

The Union Carbide Institute Site is a manufacturing facility that annually produces many specialty chemical products. Most products are intermediates used in other processes or sold to Institute site customers who convert them into finished products. Maximum threshold inventory quantities of EtO have decreased some of the RMP processes at Institute due to deregistration of the Cellosize process in 2017 and POLYOX Water Soluble Resins process for which the ownership has changed to DuPont in 2019. For example, the last required 5 year risk management plan submitted to EPA on June, 2019, the amount of EtO currently used/stored in a process at the Institute site is 4,830,000 lbs. Five years prior in their 2014 RMP submittal the EtO amount was 6,660,000 lbs.

Question 2. I just interviewed an expert source who recommended urinary or wastewater-based biomarkering as a method to detect ethylene oxide exposure. Is this method something that EPA has explored or conducted, and if so, to what extent? The method I'm referencing is described in greater detail [here](#)

We are not aware of any EPA involvement in this method.

Question 3. I've come across this [OIG report](#) from last year saying that there would be potential outreach activities for the first half of calendar year 2020 for residents near Union Carbide's Institute and South Charleston facilities. Were there, and what did those consist of?

WVDEP requested that we conduct additional modeling analysis for the two Union Carbide facilities (which includes Covestro). These analyses used on-site meteorological data as well as comprehensive identification of emission sources within each facility. The modeling analyses confirmed that there remain higher risks in the area, although less wide spread. WVDEP is considering various options to confirm the modeling results. At that time, we (EPA and WVDEP) will be launching discussions with the facilities, the surrounding communities, elected officials, and other stakeholders.

Deadline: Noon Friday, May 21